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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,577	06/28/2001	Shigefumi Sakai	210354US0	2545
22850	7590	09/22/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			YU, GINA C	
			ART UNIT	PAPER NUMBER
			1617	
			NOTIFICATION DATE	DELIVERY MODE
			09/22/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 09/892,577	Applicant(s) SAKAI ET AL.	
	Examiner GINA C. YU	Art Unit 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/15/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 15, 2008 has been entered.

Oath/Declaration

Declaration filed under 37 C.F.R. § 1.132, submitted on May 7, 2008, has been fully considered. Examiner views that the declaration does not place the present case in condition for allowance.

Declaration states that the hydrogel particles of the present invention and the prior art (Delrieu et al. US 5961990) differs on the particle size distribution requirement. However, the prior art teaches on col. 5, lines 51 – 59 to use mesh filtration to obtain particles of more uniform particles and applicant also has employed the same method before measuring the CV value of the hydrogel particles of the present invention. See p. 43, Experiment (2); p. 51, Evaluation. Since the prior art already teaches a method of controlling the uniformity of the particle size and particularly teaches to produce "a more uniform product", it is viewed that the comparison of the hydrogel particles based on particle size distribution does not indicate significant differences between the two inventions.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 52, 54-66, 69-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delrieu et al. (US 5961990) (“Delrieu”).

Delrieu teaches agar gel beads of an average diameter of 2 mm comprising lipophilic beta-carotene dispersed in water. See Example 7; instant claims 55, 56, 62, 63. The reference teaches that the particles are formed by injecting the agar solution/beta-carotene mixture through a needle into liquid paraffin oil at 5 °C, a temperature below the agar gelling point. See instant claims 61, 65. See col. 4, line 62 – col. 5, line 18 for the method of making the beads. The resulting agar beads are then incorporated into cosmetic compositions such as creams, gels and lotions (an aqueous composition). See col. 16, lines 53 – 58; instant claim 72. While the applications of vibration to the apparatus as recited in instant claim 54 and its dependent claims are process limitations, it is nevertheless noted that Delrieu teaches to control the size of the beads by agitation of the oil bath. Col. 13, line 65 – col. 14, line 6; Example 10.

The reference teaches restraining polymers that are dispersed in the agar gel, which is viewed as polymer emulsifying-dispersing agents, which include quaternized polysaccharides. See col. 4, lines 6 – 20; col. 8, line 18 – col. 10, line 5. See instant claims 64, 66. The reference teaches that at least 80 % of the particles are within the desired average particle size range of 0.05-10 mm. See col. 5, lines 42 – 59.

As for claims 70 and 71, it is well settled in patent law that if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present since a chemical composition and its properties are inseparable. See In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, the prior art agar beads that meet the claimed limitations of instant claim 33 necessarily has the same breaking intensity and gel strength of the gel bead as recited in claims 70 and 71, respectively. See also col. 13, lines 7 – 26 which teaches that the hardness of the gel beads are controlled so that the beads are soft and crushable upon contact with the skin.

While Delrieu fails to specifically teach hydrogel particles having a CV value for particle diameter of 5 or less, the reference nonetheless indicates that preferably the uniformity of the particle size is controlled by mesh filtration. See col. 5, lines 51 – 59; instant claim 52.

Thus it would have been obvious to one of ordinary skill in the art at the time of the present invention to control the uniformity of the particle size of the Delrieu's hydrogel particles by mesh filtration as suggested by the reference because the reference teaches that a more uniform product is preferred. The skilled artisan would have obviously obtained hydrogel particles having a narrow particle size distribution and achieved the presently claimed CV value.

Claims 53 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delrieu et al. as applied to claims 52, 54-66, 69-72 as above, and further in

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view of Noda et al. (US 5089269) in view of Noda et al. (US 5089269) (“Noda”) and Rosentreich et al. (US 3932609) (“Rosentreich”).

Delrieu fails to teach the viscosity and the specific gravity of the aqueous medium of the composition.

Noda teaches skin cosmetics such as lotions which contain oily components and emulsifiers enclosed in gelatin microcapsules in the aqueous phase. See Examples 3-1 through 3-7. The gelatin capsules in Noda are considered to be “non-crosslinked hydrogel” as applicants define in instant specification p. 5, lines 21 – p. 6, line1, since the gel in Noda is formed by dissolving the gelatin in heated water and cooling. See Noda, Example 3-1. See also col. 8, lines 45 – 51 for suitable water-soluble polymers including agar. Noda further teaches that the viscosity of the compositions ranges from 1,000 to 20,000 cps (1000 –20,000 mPa.s), which is within the claimed range in the instant claim 17. See col. 5, lines 56 – 63. While the reference lacks the teaching of the specific gravity of the composition, it teaches of a surfactant solution containing capsules with improved dispersity by adjustment of the specific gravity. See col. 3, lines 40 – 45. Based on this disclosure in Noda, examiner views that a routineer would have discovered the optimal range of the specific gravity of the aqueous medium of the instant invention by routine experimentation.

Rosentreich et al. teach stable antiperspirant liquid compositions. The reference teaches the preferred viscosity range for the lotion formulation is 500-2225 cps (500-2225 mPa.s) at ambient temperature, while the specific gravity is 1.100-1400. See col. 4, lines 21 – 29.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of Delrieu by adjusting the viscosity and specific gravity of the aqueous medium of the composition as motivated by Noda and Rosentreich because 1) Noda teaches the acceptable viscosity range of a cosmetic such as lotion which contains agar beads; and further teaches that adjust specific gravity of a solution can improve the dispersity of capsules in the composition; 2) Rosentreich teach the preferred viscosity and specific gravity for an aqueous lotion composition. The skilled artisan would have had a reasonable expectation of successfully producing a cosmetic composition having topically acceptable viscosity and good dispersity of the agar beads by combining the teachings of the references.

Claims 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delrieu, Noda, and Rosentreich as applied to claims 52-66, 69-73 as above, and further in view of Tsaor et al. (US 5726138).

While Delrieu, discussed above, teaches dermatological actives suitable for the invention in col. 10, lines 6 – col. 11, line 11, the reference fails to teach solid fatty actives or ceramides.

Tsaor discloses aqueous compositions comprising hydrogel particles comprising water-insoluble skin benefit ingredients entrapped therein. See col. 2, line 63 – col. 3, line 60. Tsaor teaches that the suitable benefit agents include specific waxes, hydrocarbons, cholesterol ester ceramides, and pseudoceramides. See col. 8, lines 5 – 58; Examples 8-10; see instant claims 67 and 68. These actives are taught to provide protection, moisture or conditioning effect to the skin. See *Id.* The reference teaches

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that the benefit agent is dispersed in the hydrogel-forming polymers before the formation into hydrogel particles. See col. 4, lines 28 – 44. Using surfactants in mixing the benefit agent and the hydrogel-forming polymer solution is also disclosed in col. 9, lines 6 – 24. The reference teaches using acrylic polymers such as modified polysaccharides, cationic modified cellulose, Carbopol by B.F. Goodrich, polyvinyl alcohol, which meet the “polymer emulsifying or dispersing agent” limitation of instant claim. See col. 7, lines 48-65. It is also noted that modified polysaccharides and cationic modified cellulose are used in Delrieu as restraining polymers. The reference teaches an aqueous lotion composition with petrolatum, a solid fatty substance with m.p. 38-60°C, contained in a hydrogel particle comprising chitosan, a non-crosslinked, thermal gelatin. See Example 15. The diameter of the petrolatum hydrogel particles there is deemed to be 200 microns. Tsaur teaches using two types of polymers to form hydrogel, wherein the first polymer may be thermal gelatin, such as agar or gelatins; and the second polymer is selected depending on the desired gel strength. See col. 5, line 56 – col. 6, line 22. The reference further teaches that the gel strength can be manipulated by controlling the amounts of the two polymers and the particle size. See col. 7, lines 33 – 40; col. 17, lines 44 – 57.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compositions comprising agar beads of Delrieu by substituting the actives with the Tsaur wax or ceramides along with surfactants, as motivated by the collective teachings of the references, because 1) Delrieu teaches using dermatologically active substances to provide prophylactic and

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treatment effect to the skin; and 2) Tsaur teaches that the disclosed benefit agents therein can protect, moisturize or condition the skin after being deposited from the aqueous composition.

The skilled artisan would have had a reasonable expectation of successfully producing a cosmetic composition which provides the controlled-release of the cosmetic wax or ceramide active ingredients because both Delrieu and Tsaur are teach hydrogel particles comprising oily active ingredients dispersed therein which are then incorporated into aqueous medium.

Response to Arguments

Applicant's arguments with respect to claims 52-73 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GINA C. YU whose telephone number is (571)272-8605. The examiner can normally be reached on Monday through Friday, from 8:00AM until 5:30 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gina C. Yu/
Primary Examiner, Art Unit 1617